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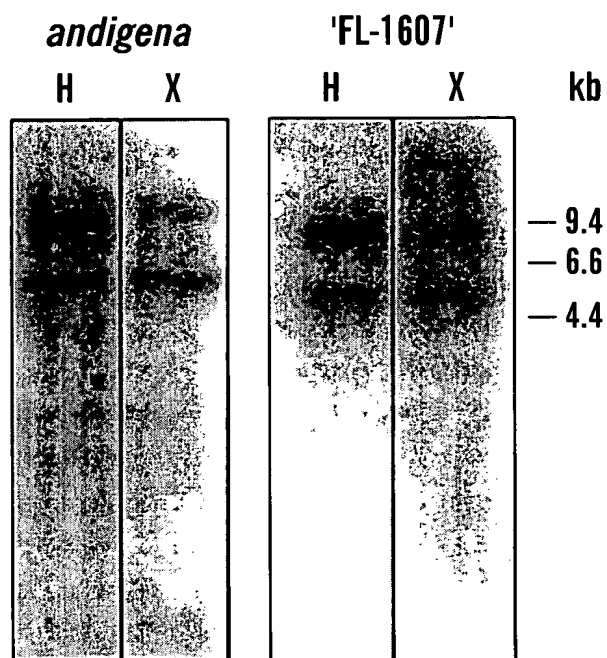
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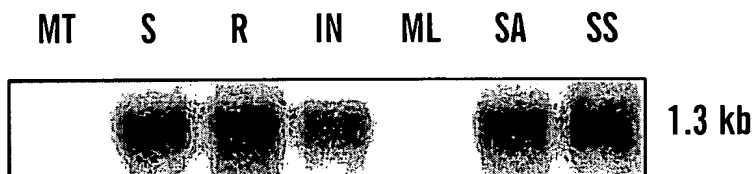
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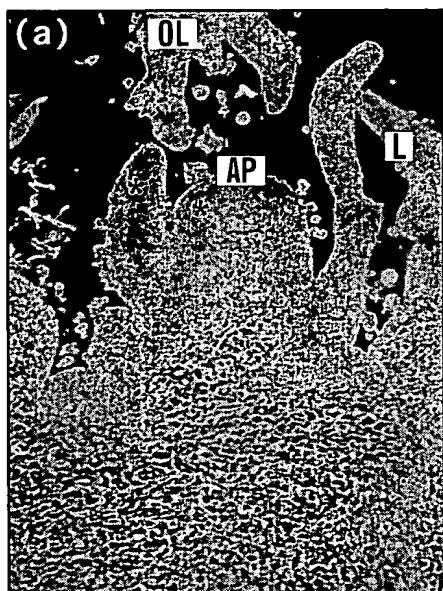


**FIG. 1**

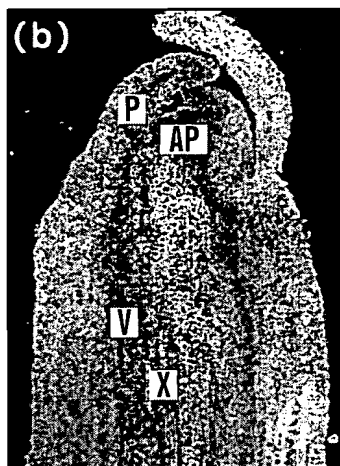


**FIG. 2**

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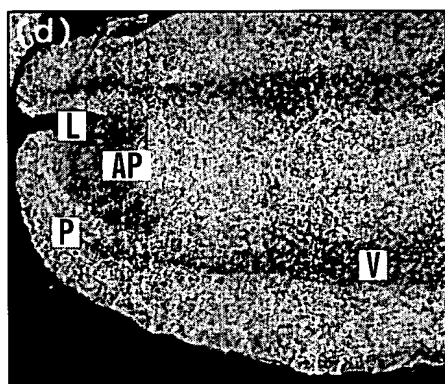
**FIG. 3A**



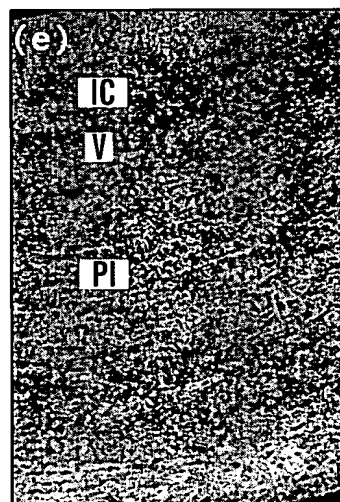
**FIG. 3B**



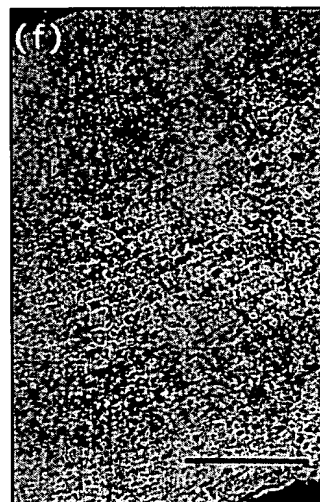
**FIG. 3C**



**FIG. 3D**

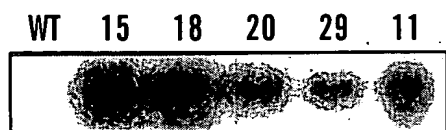


**FIG. 3E**

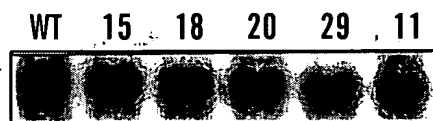


**FIG. 3F**

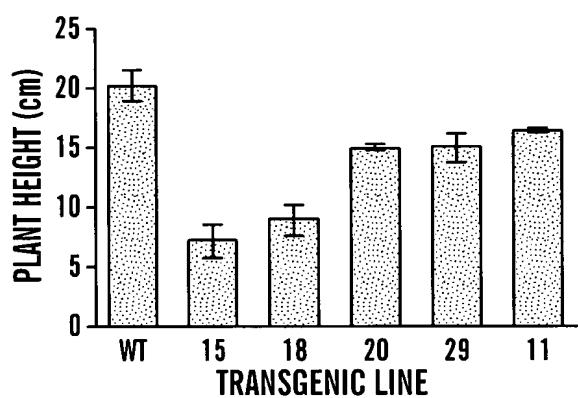
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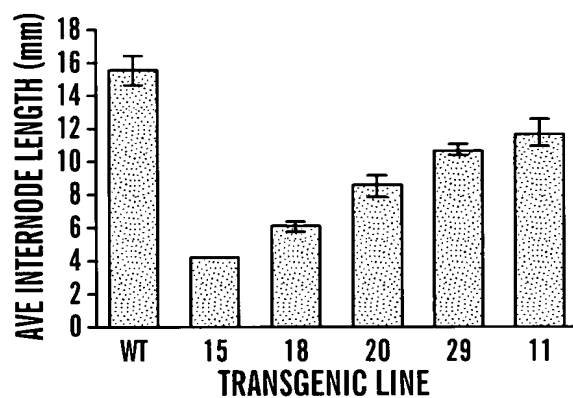
**FIG. 4A**



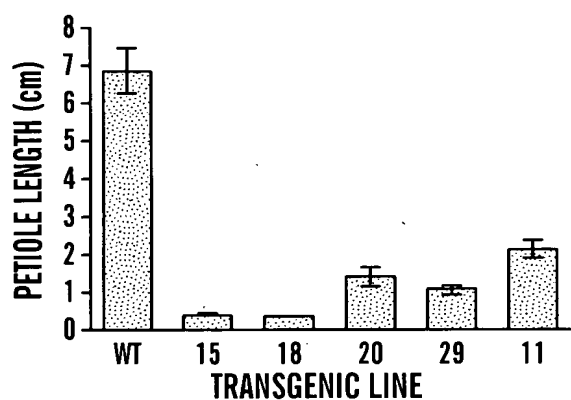
**FIG. 4B**



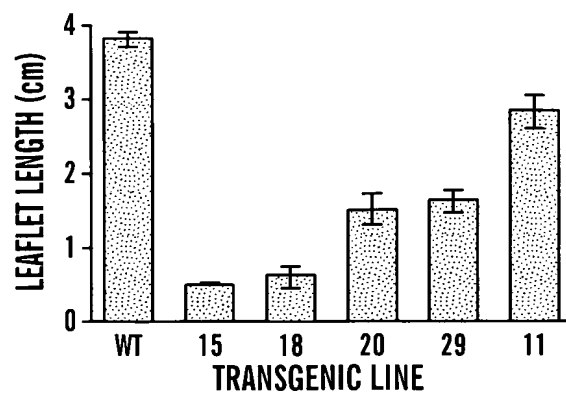
**FIG. 4C**



**FIG. 4D**

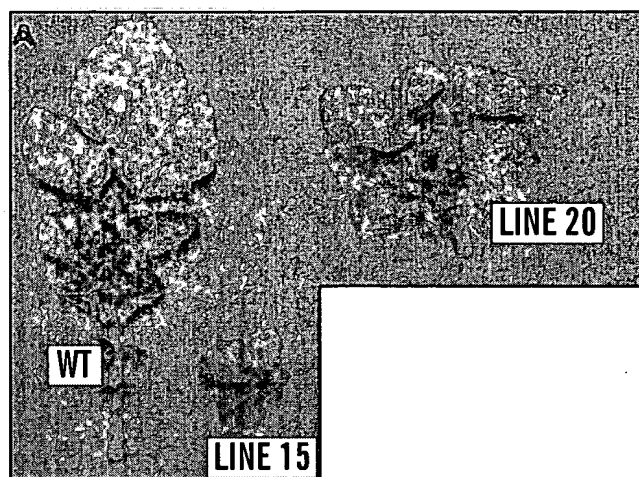


**FIG. 4E**

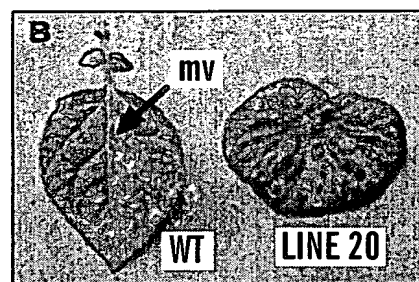


**FIG. 4F**

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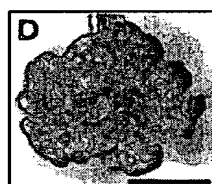
**FIG. 5A**



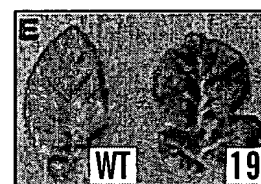
**FIG. 5B**



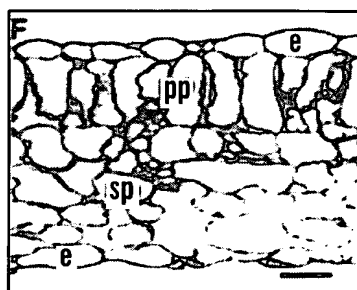
**FIG. 5C**



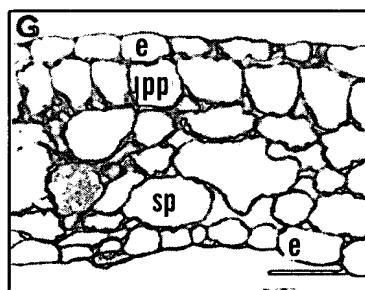
**FIG. 5D**



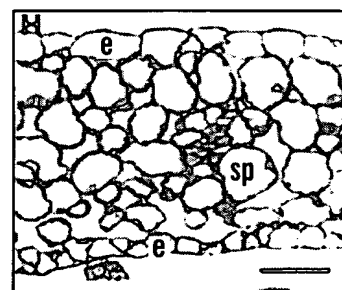
**FIG. 5E**



**FIG. 5F**

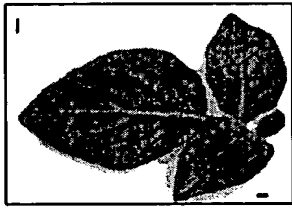


**FIG. 5G**

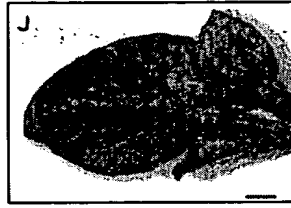


**FIG. 5H**

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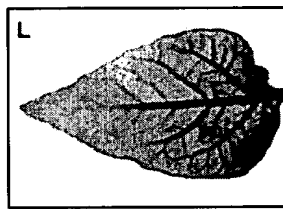
***FIG. 5I***



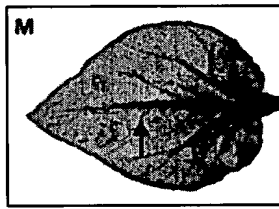
***FIG. 5J***



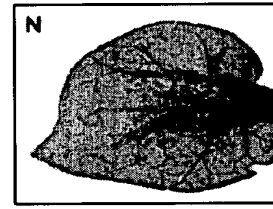
***FIG. 5K***



***FIG. 5L***



***FIG. 5M***



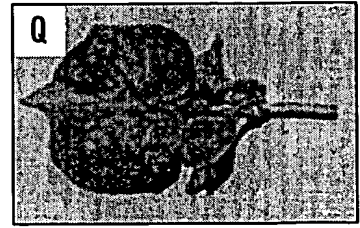
***FIG. 5N***



***FIG. 5O***

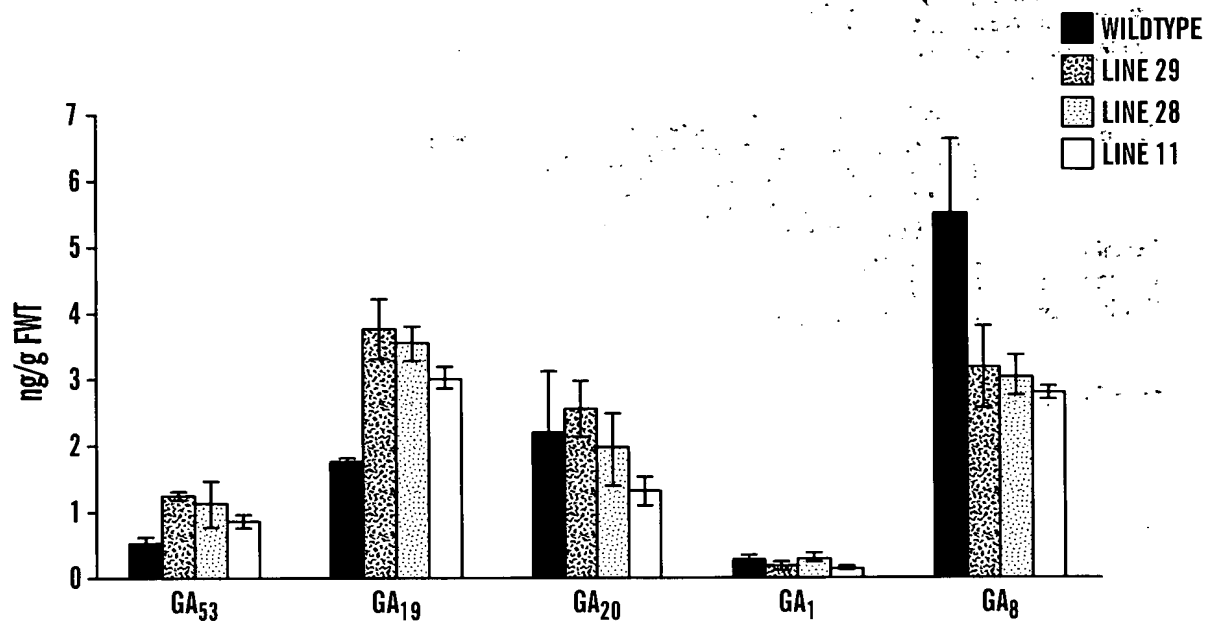


***FIG. 5P***

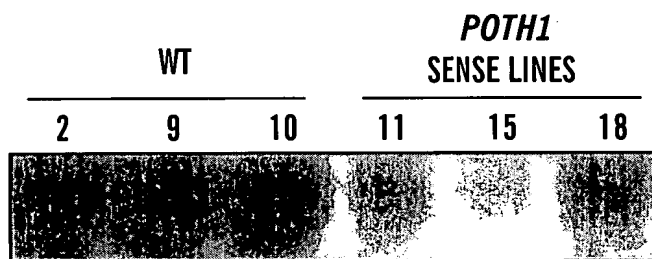


***FIG. 5Q***

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**FIG. 6**



**FIG. 7A**



**FIG. 7B**

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POTH1  
MUTANTS

1

2

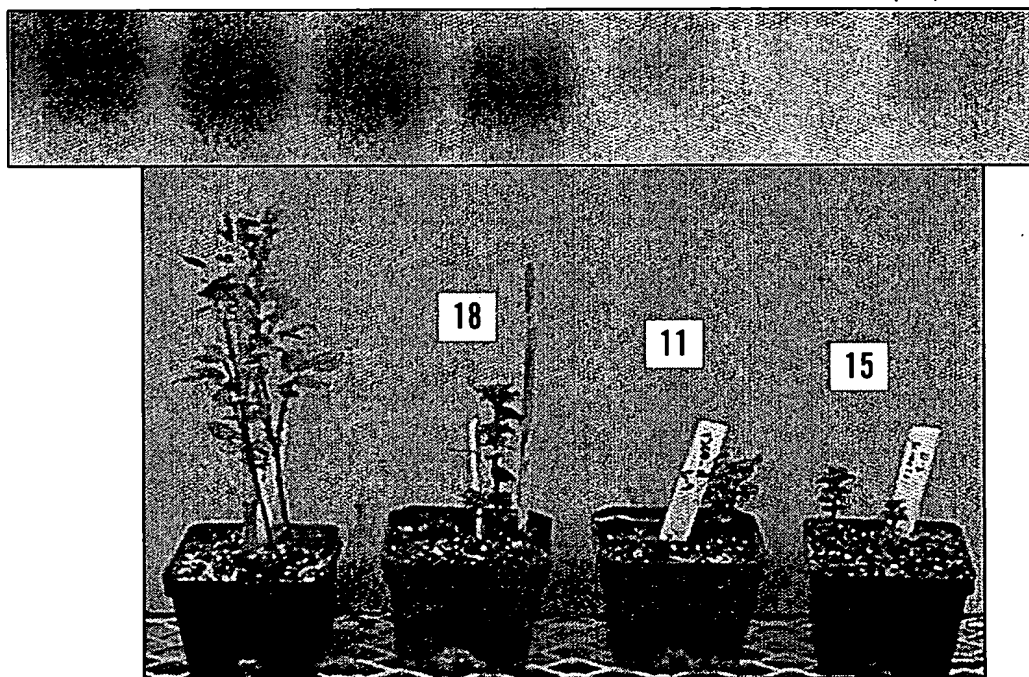
9

10

11

15

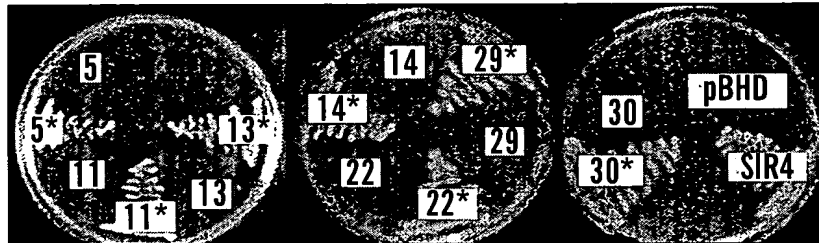
18



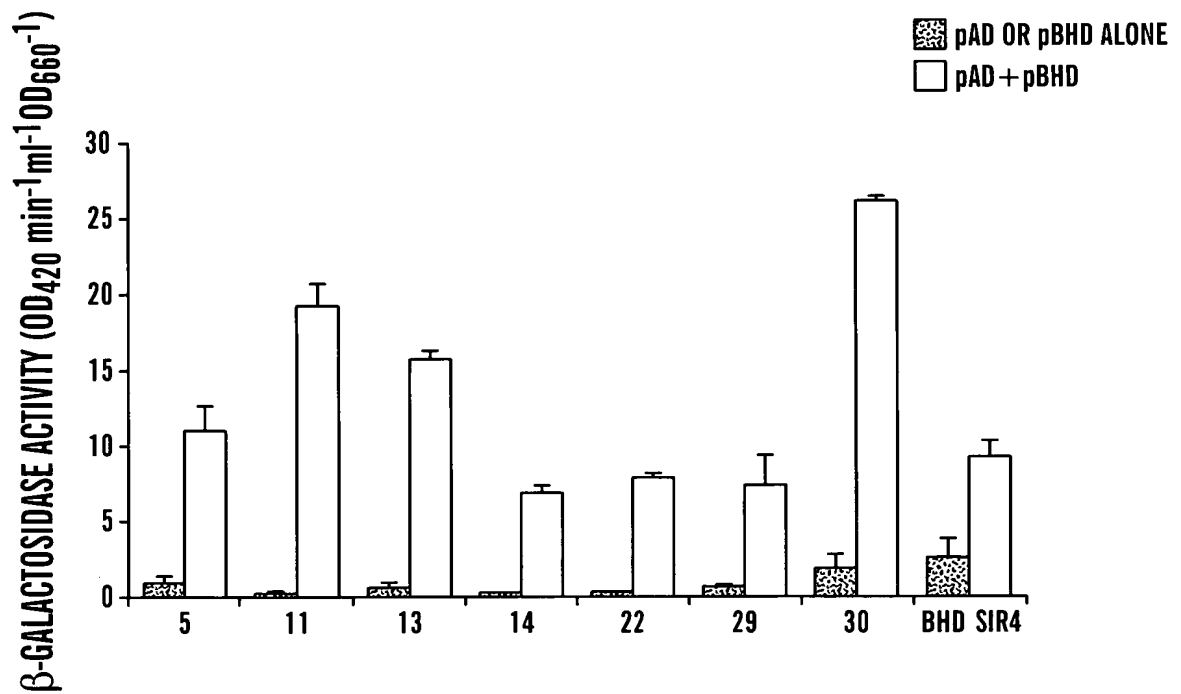
**FIG. 8**



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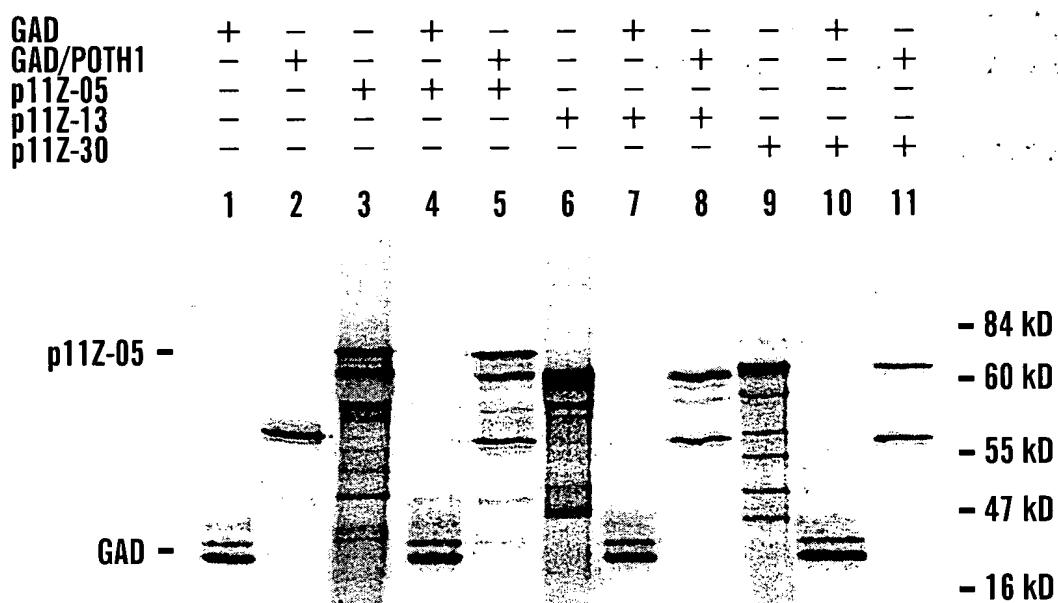


**FIG. 9A**





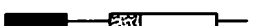





**FIG. 9B**

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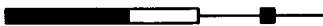









**FIG. 9C**

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		GROWTH ON SELECTIVE MEDIA	RELATIVE % $\beta$ -gal ACTIVITY
POTH1 (345 aa)		YES	100
pBHD1 (115-345)		YES	35
pBHD2 (165-345)		YES	45
pBHD3 (209-345)		NO	0
pBHD4 (1-261)		YES	72
pBHD5 (1-223)		YES	92
pBHD6 (1-171)		YES	25
pBHD9 (1-113)		YES	38

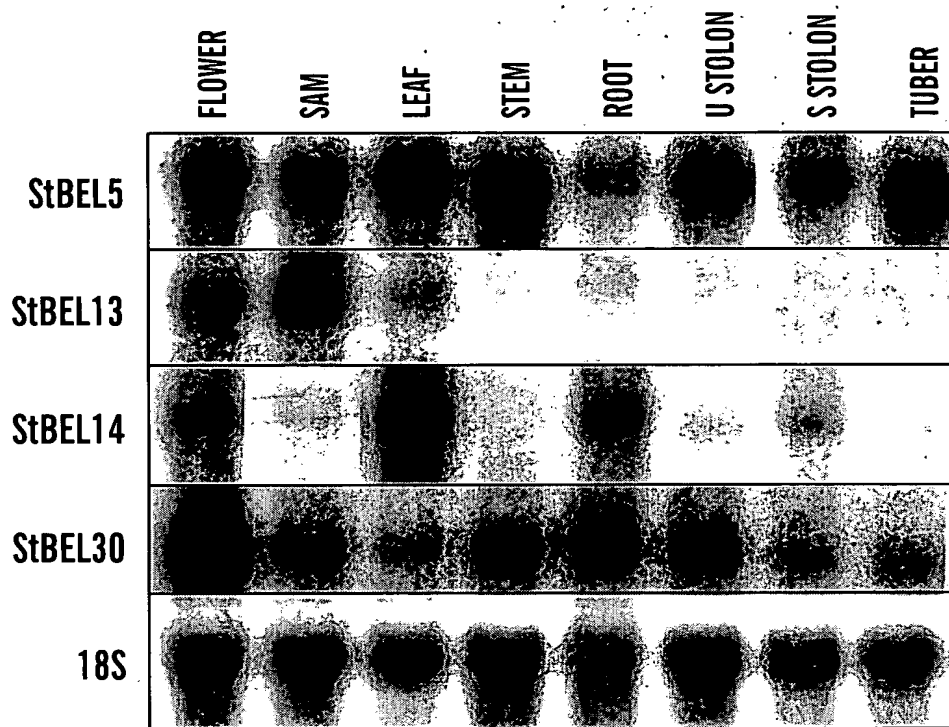
**FIG. 10A**

		GROWTH ON SELECTIVE MEDIA	RELATIVE % $\beta$ -gal ACTIVITY
pAD5 (653 aa)		YES	100
pAD5-1 (230-653)		YES	45
pAD5-2 (257-653)		NO	0
pAD5-3 (313-653)		NO	0
pAD5-4 (348-653)		NO	0
pAD5-5 (384-653)		NO	0
pAD5-7 (1-487)		YES	97
pAD5-8 (1-358)		YES	57
pAD5-9 (1-315)		YES	9.1
pAD5-11 (1-286)		YES*	0

\*INTERACTION WITH THIS CONSTRUCT PRODUCED A FEW, SLOW GROWING COLONIES BUT NO DETECTABLE  $\beta$ -gal ACTIVITY.

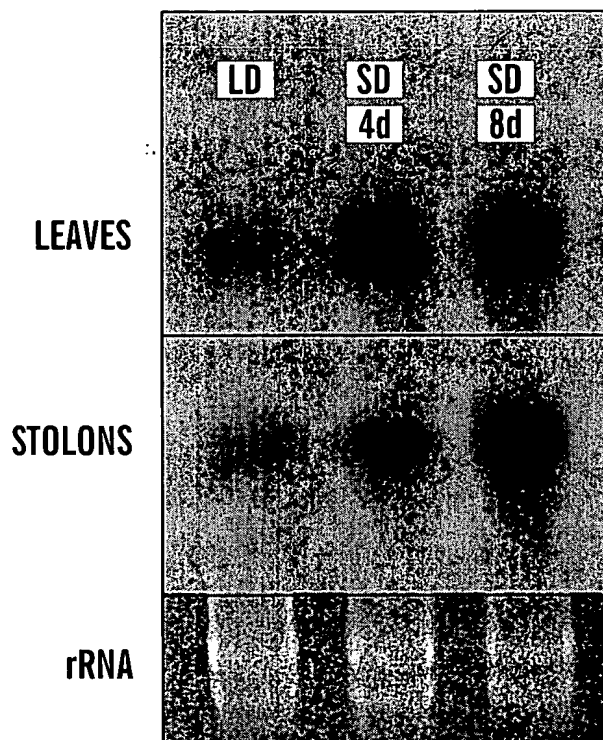
**FIG. 10B**

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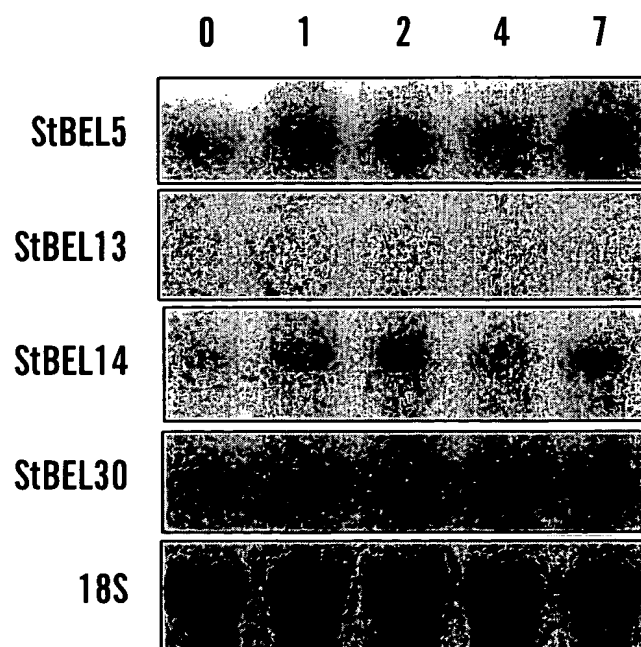


***FIG. 11A***

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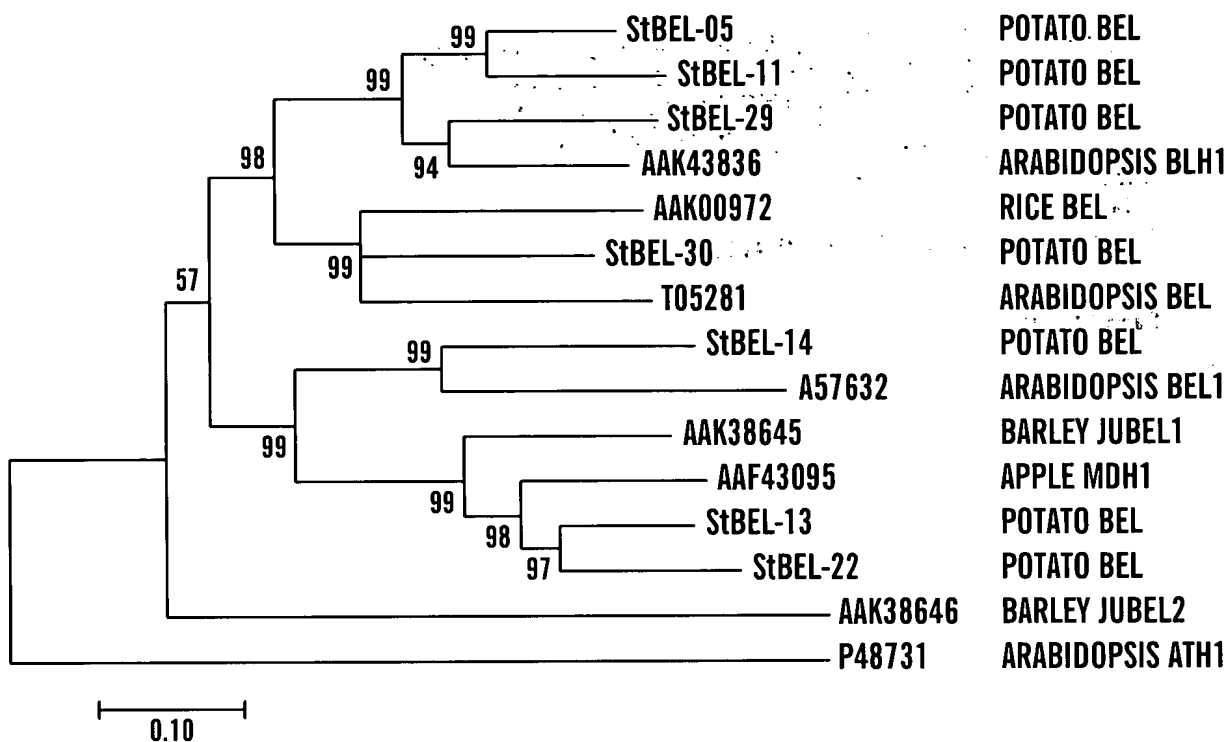


**FIG. 11B**



**FIG. 11C**

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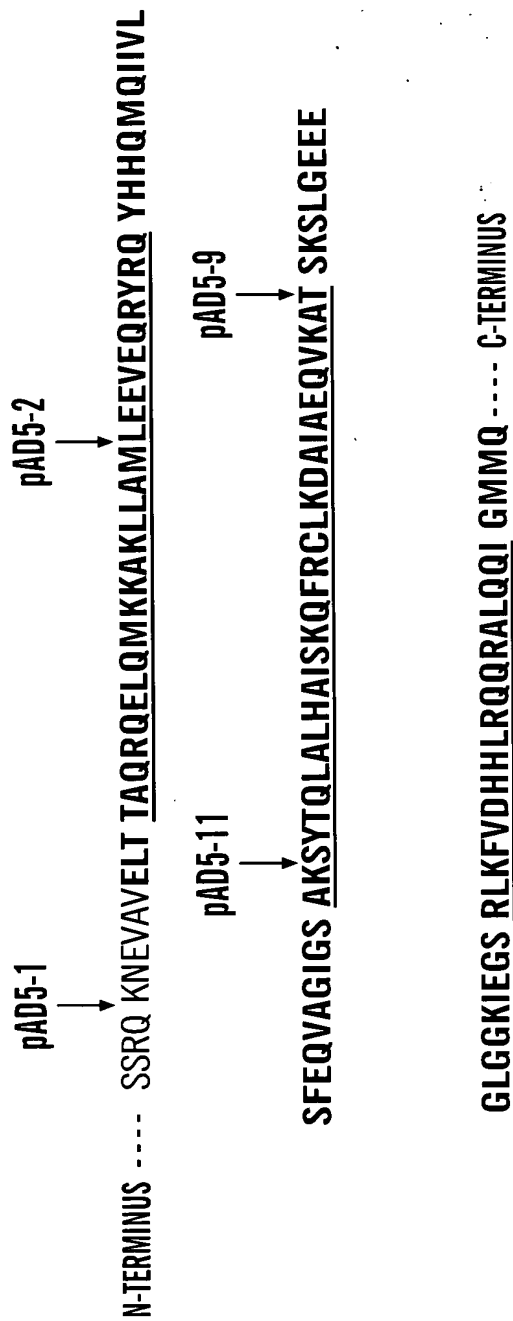


**FIG. 12**



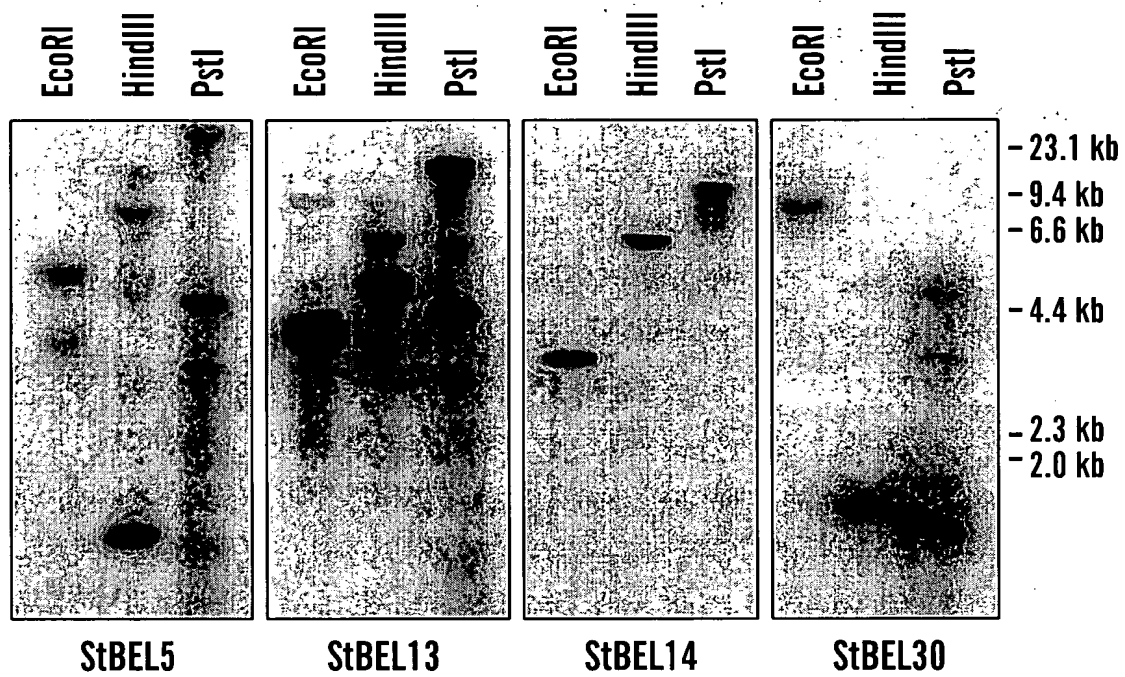
**FIG. 13A**

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**FIG. 13B**

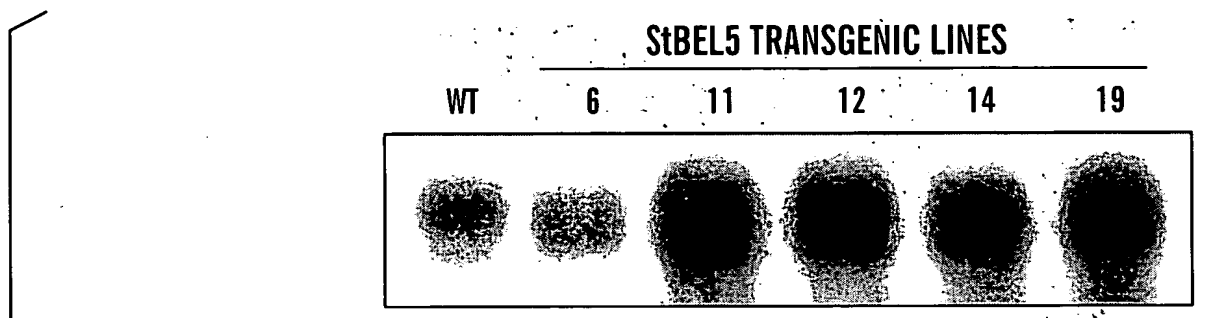
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**FIG. 13C**



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**FIG. 14A**

DAYS TO TUBERIZE	UNDER LD	-	-	7	7	7	14
	UNDER SD	10	10	NA	NA	NA	NA
NO. TUBERS*	AFTER 0d	0	0	6	4	5	1
	AFTER 7d	0	0	10	8	15	4
	AFTER 14d	6	4	12	14	24	10

**FIG. 14B**

TUBER YIELD PLANT <sup>-1</sup> (mg)*	18	28	18	95	292	50
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\*FROM TWENTY-FOUR PLANTLETS PER LINE, THIRTY-FIVE FOR WT

**FIG. 14C**

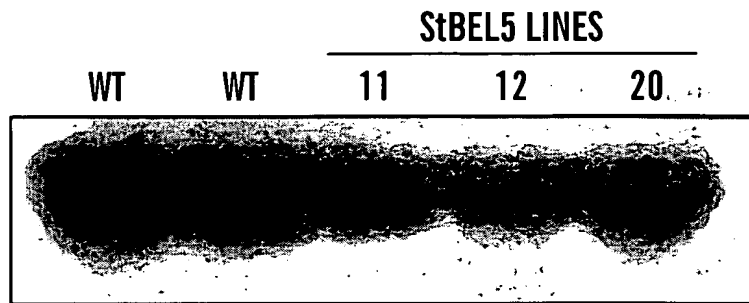
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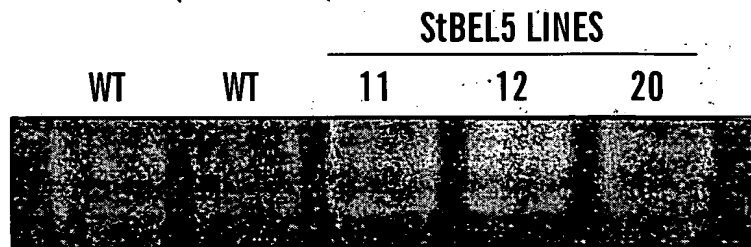
***FIG. 15***

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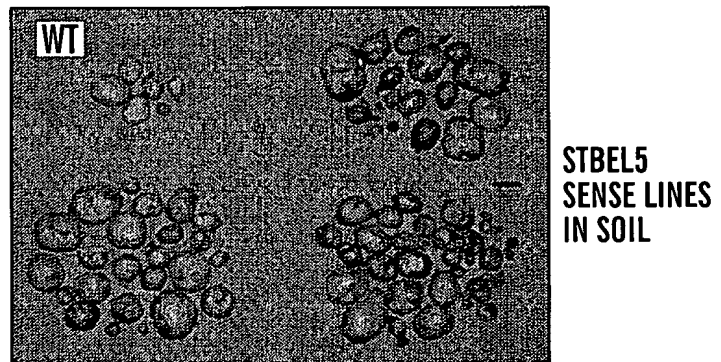
**FIG. 16A**



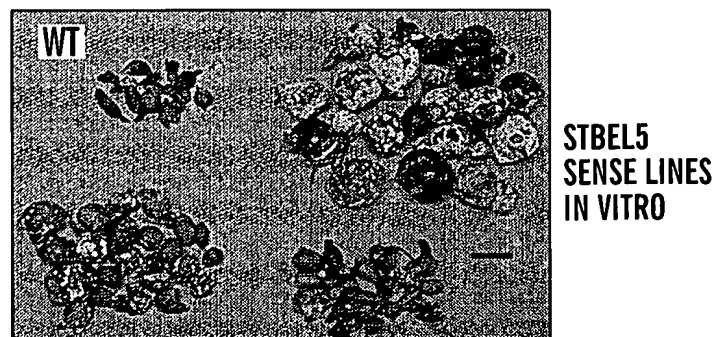
**FIG. 16B**



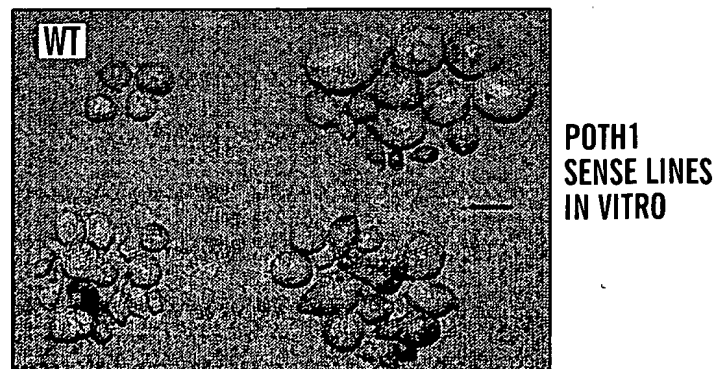
**FIG. 17A**



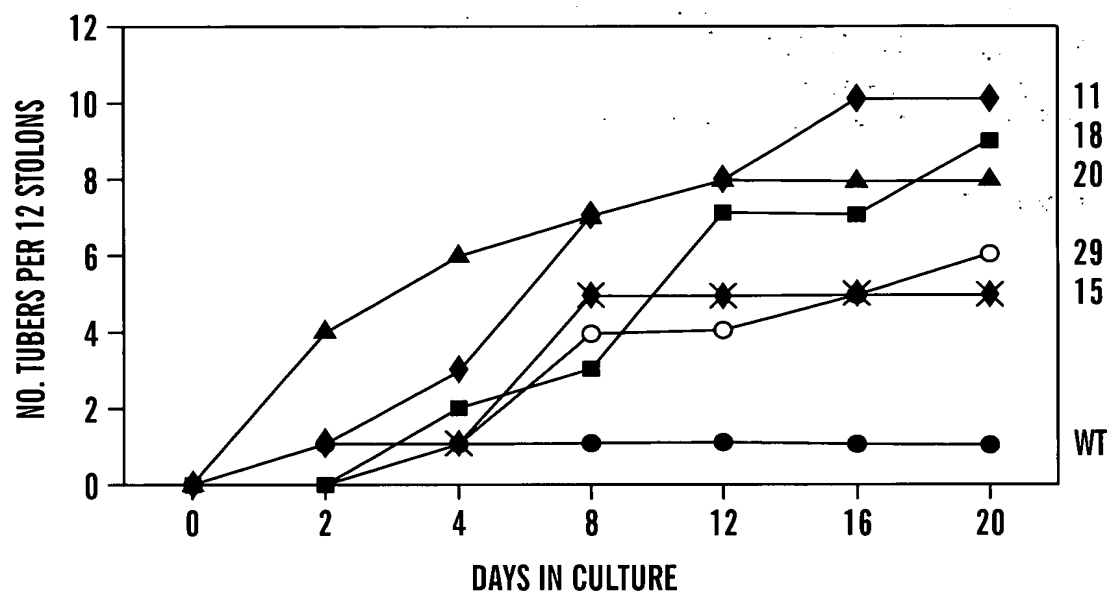
**FIG. 17B**



**FIG. 17C**

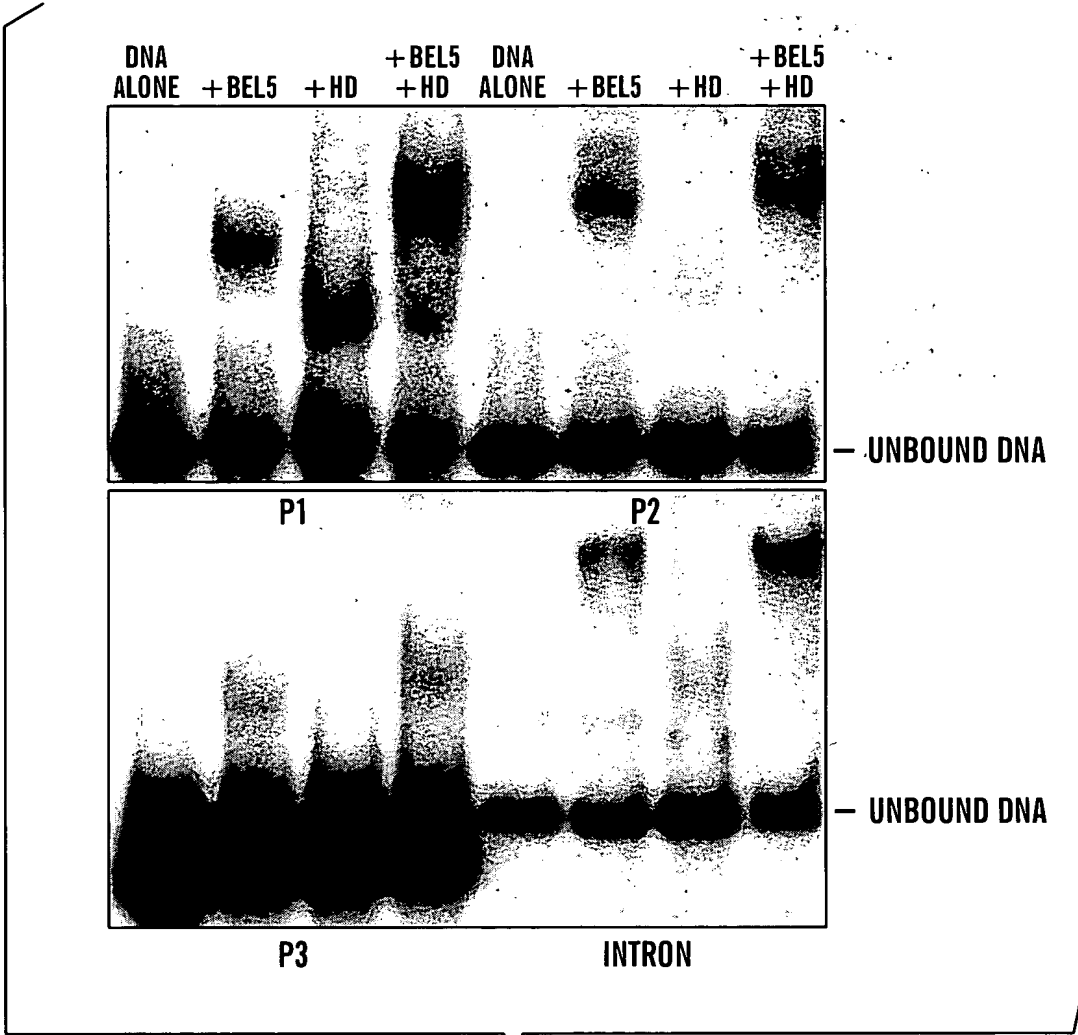


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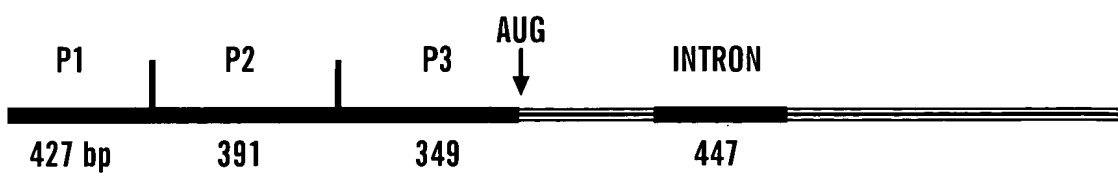


**FIG. 17D**

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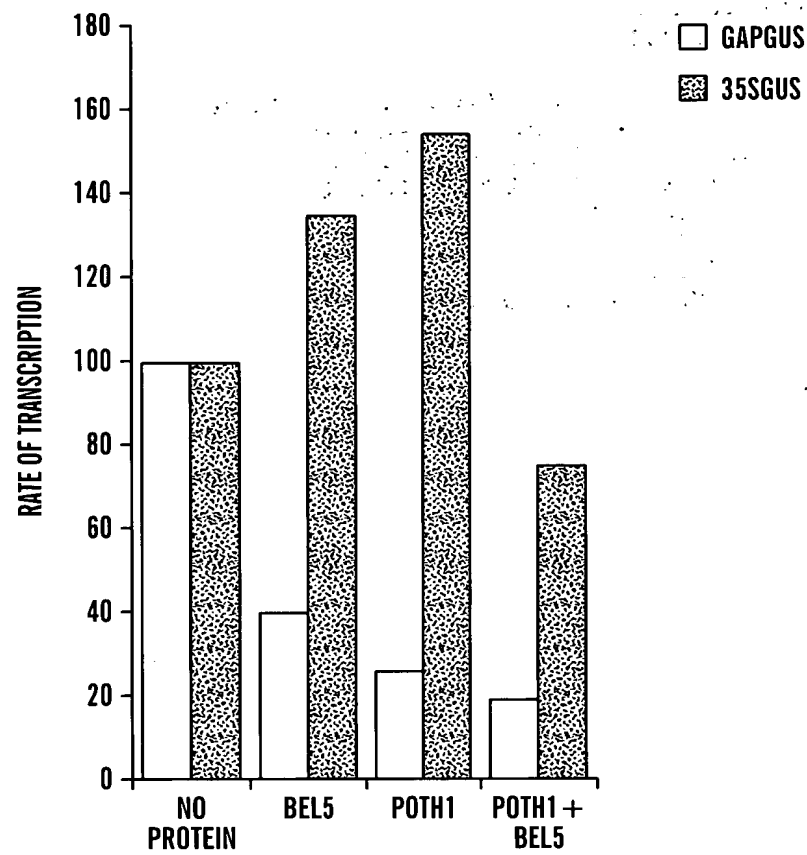


**FIG. 18A**

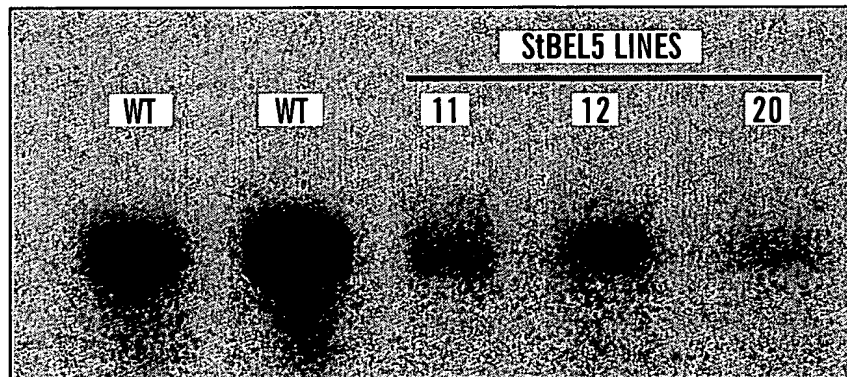


**FIG. 18B**

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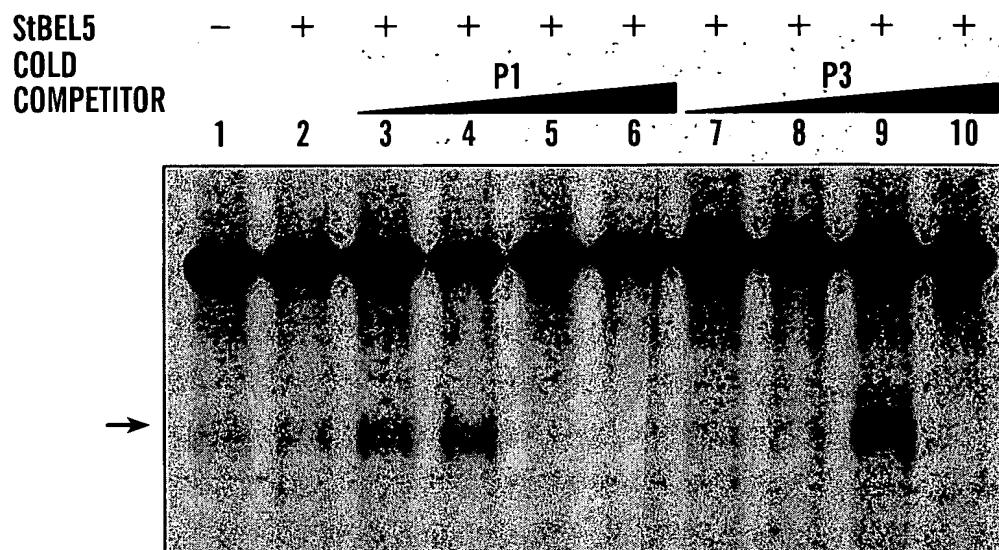


**FIG. 19**

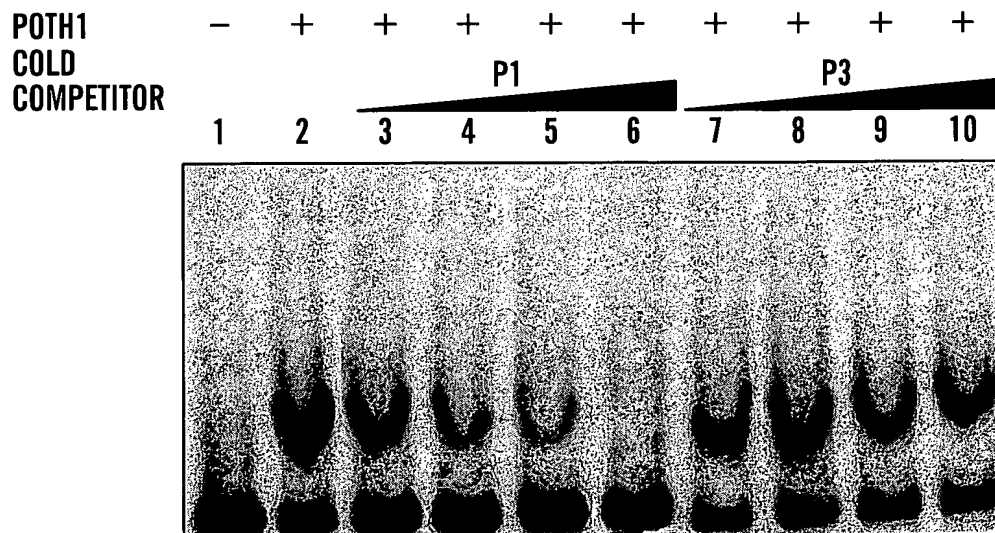


**FIG. 20**

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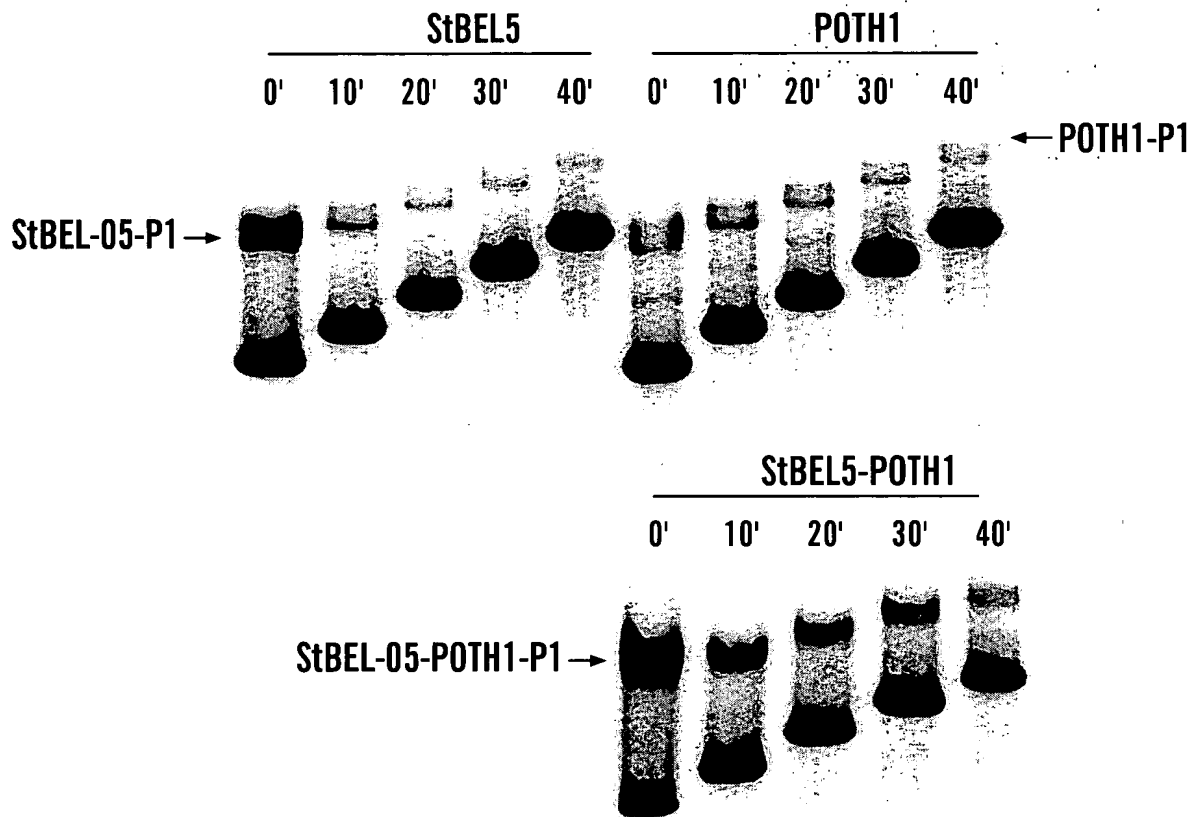


**FIG. 21A**



**FIG. 21B**

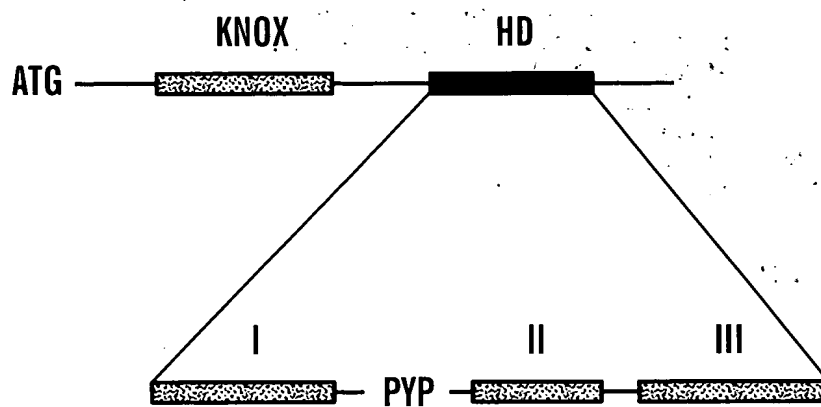
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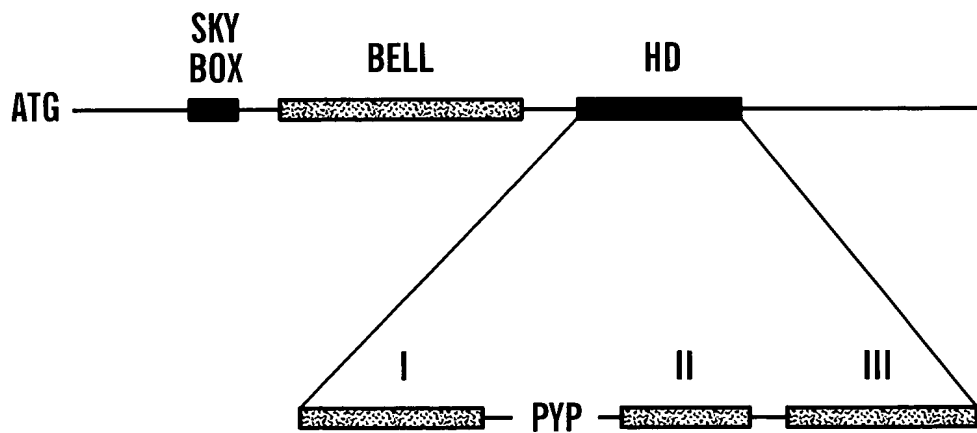
**FIG. 22**



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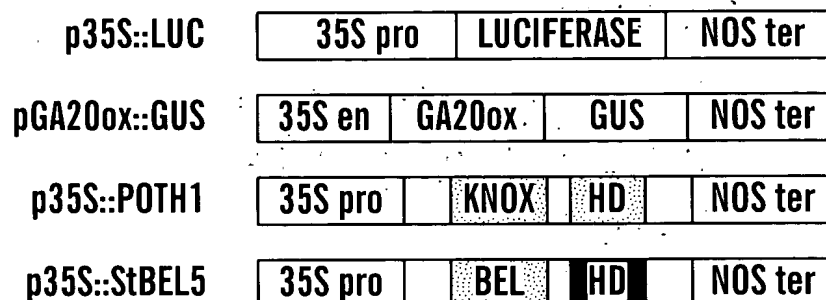


**FIG. 23A**

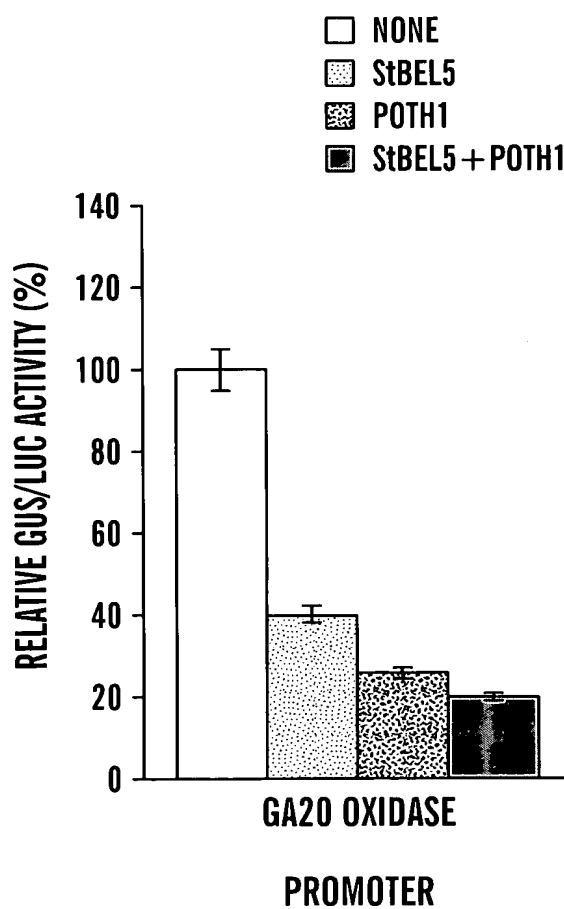


**FIG. 23B**

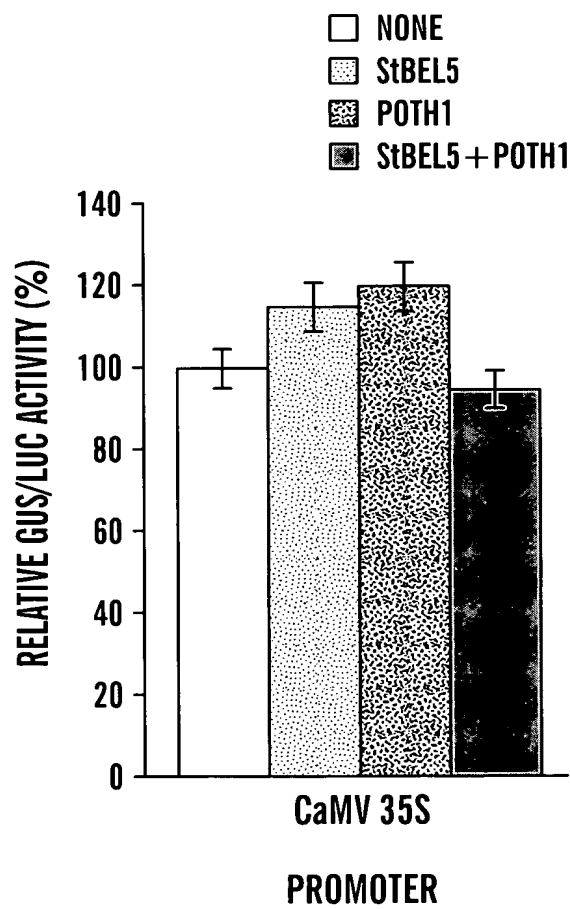
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**FIG. 24A**



**FIG. 24B**

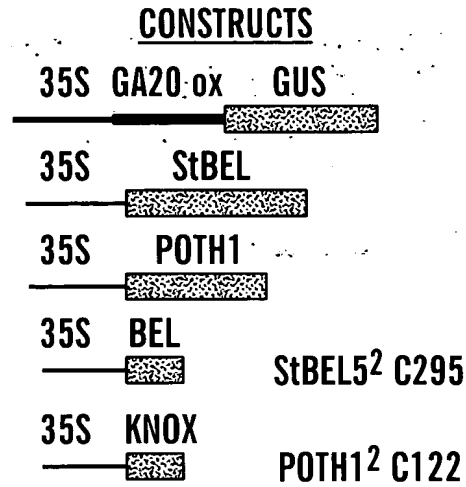


**FIG. 24C**

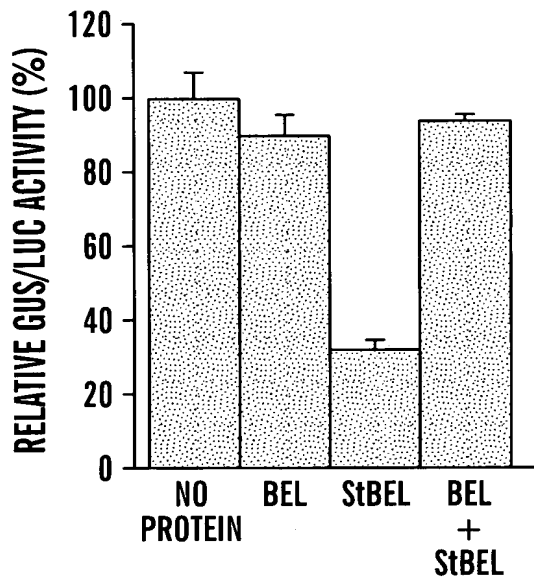
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BOTH TFs IN TANDEM ARE NEEDED TO REPRESS THE TARGET GENE

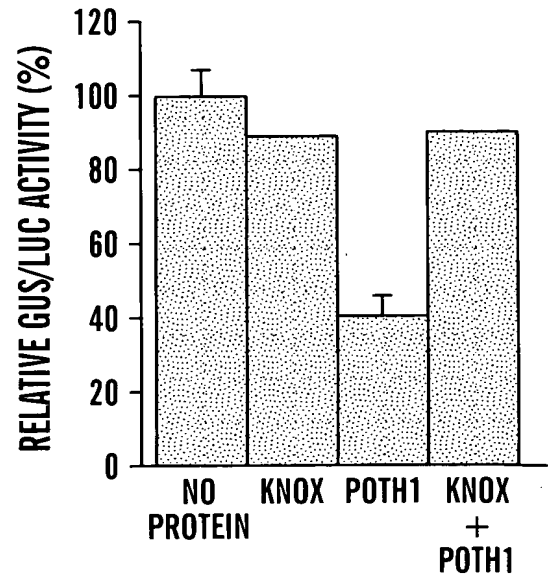
DIAGRAM OF CONSTRUCTS



**FIG. 25A**



**FIG. 25B**

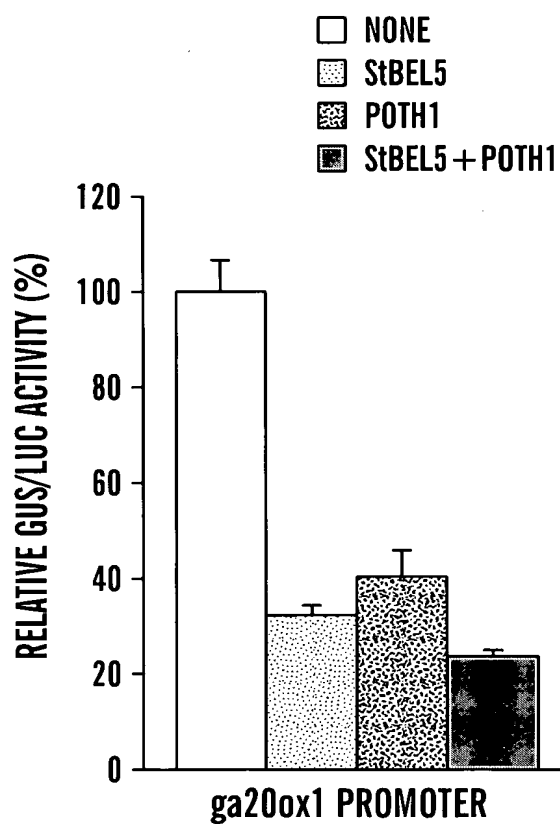


**FIG. 25C**

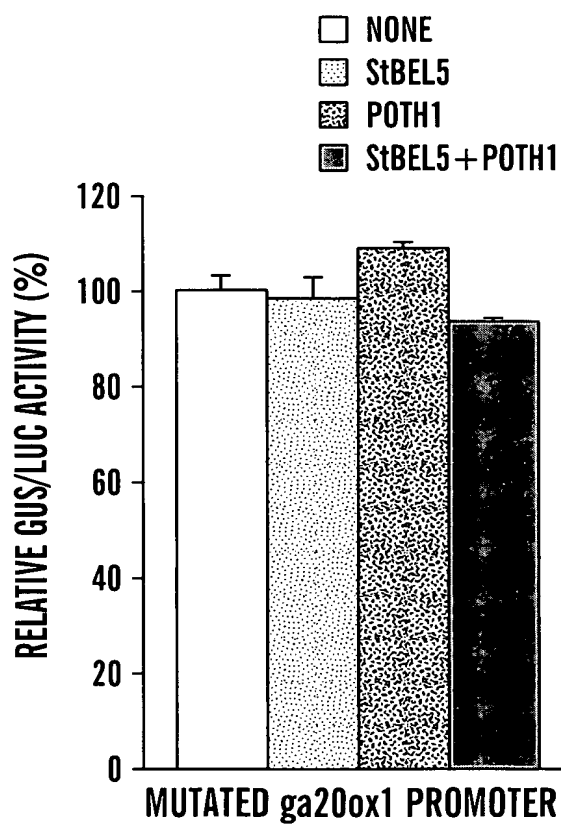
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TGACTTGAC  
↓  
TGACTTCAC (MUTATED)

**FIG. 26A**

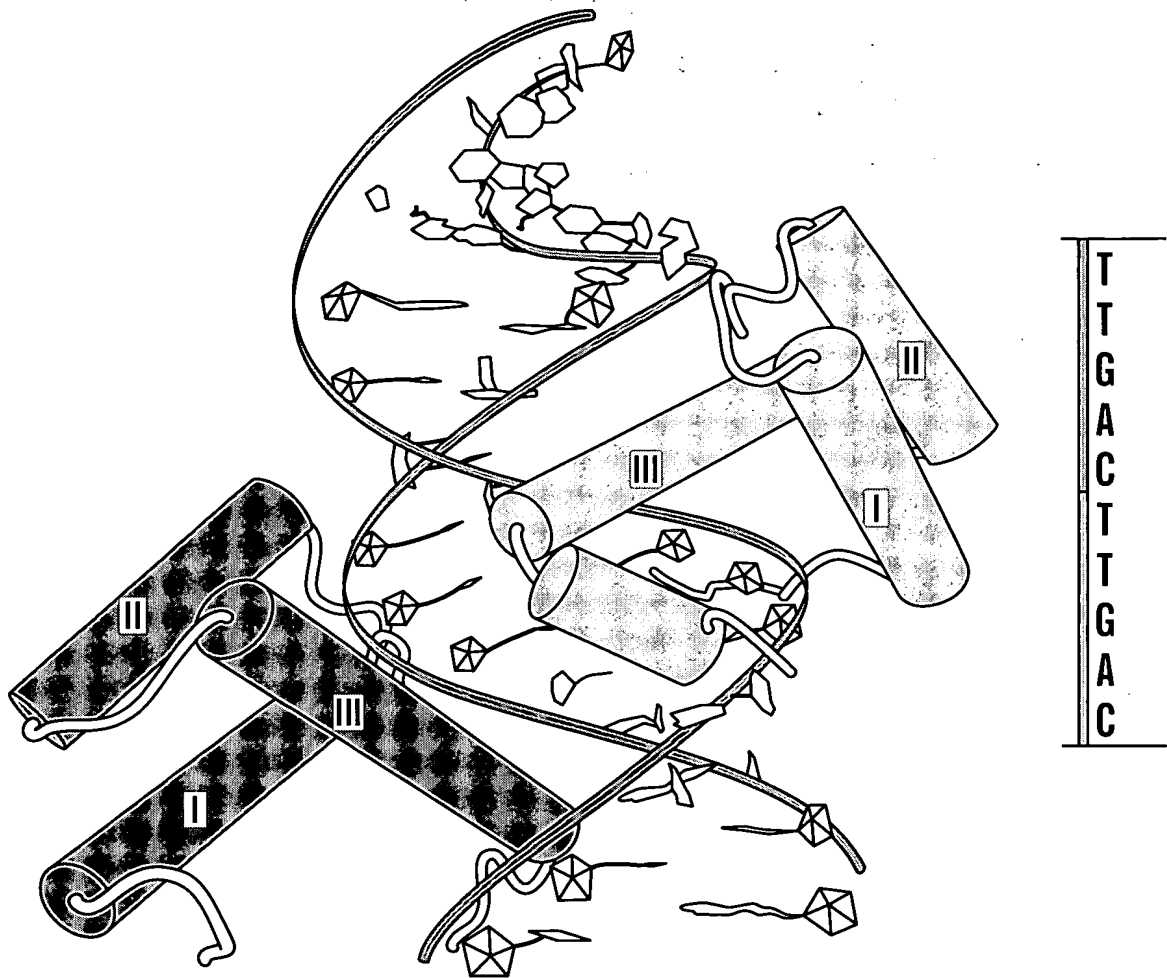


**FIG. 26B**



**FIG. 26C**

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**FIG. 27**